EXHIBIT A
(PART 1 OF 4)

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Say et al.

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(54) **ANALYTE MONITORING DEVICE AND METHODS OF USE**

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(58) **Field of Search** 600/300–301, 600/346, 306–309, 345–365, 372, 385–390; 604/174–180; 128/897–898, 903, 904, 920

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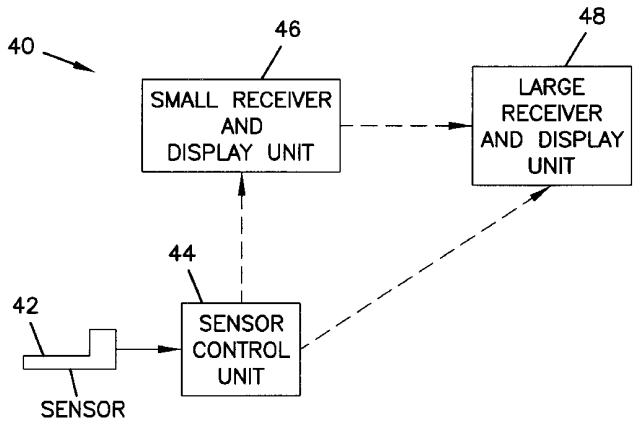
(57) **ABSTRACT**

An analyte monitor includes a sensor, a sensor control unit, and a display unit. The sensor has, for example, a substrate, a recessed channel formed in the substrate, and conductive material disposed in the recessed channel to form a working electrode. The sensor control unit typically has a housing adapted for placement on skin and is adapted to receive a portion of an electrochemical sensor. The sensor control unit also includes two or more conductive contacts disposed on the housing and configured for coupling to two or more contact pads on the sensor. A transmitter is disposed in the housing and coupled to the plurality of conductive contacts for transmitting data obtained using the sensor. The display unit has a receiver for receiving data transmitted by the transmitter of the sensor control unit and a display coupled to the receiver for displaying an indication of a level of an analyte. The analyte monitor may also be part of a drug delivery system to alter the level of the analyte based on the data obtained using the sensor.

94 Claims, 26 Drawing Sheets



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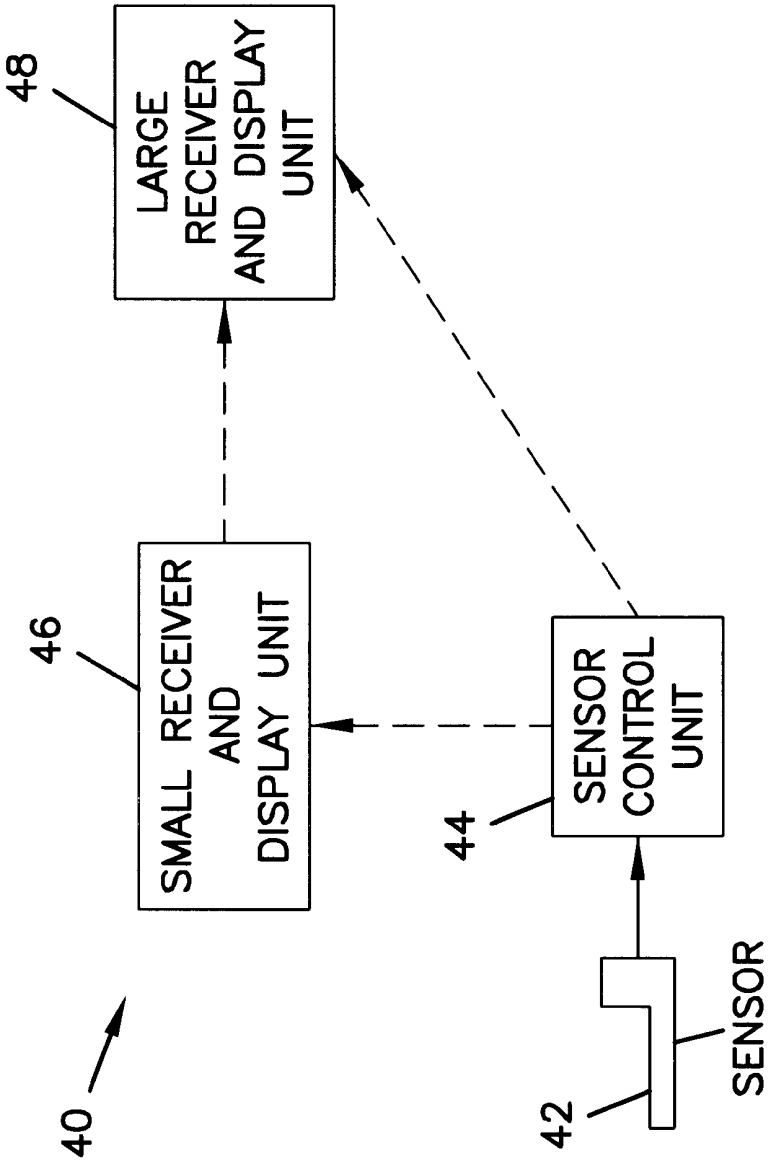
48
LARGE RECEIVER AND DISPLAY UNIT
46
SMALL RECEIVER AND DISPLAY UNIT
44
SENSOR CONTROL UNIT
42
SENSOR
40

FIG. 1

FIG. 2

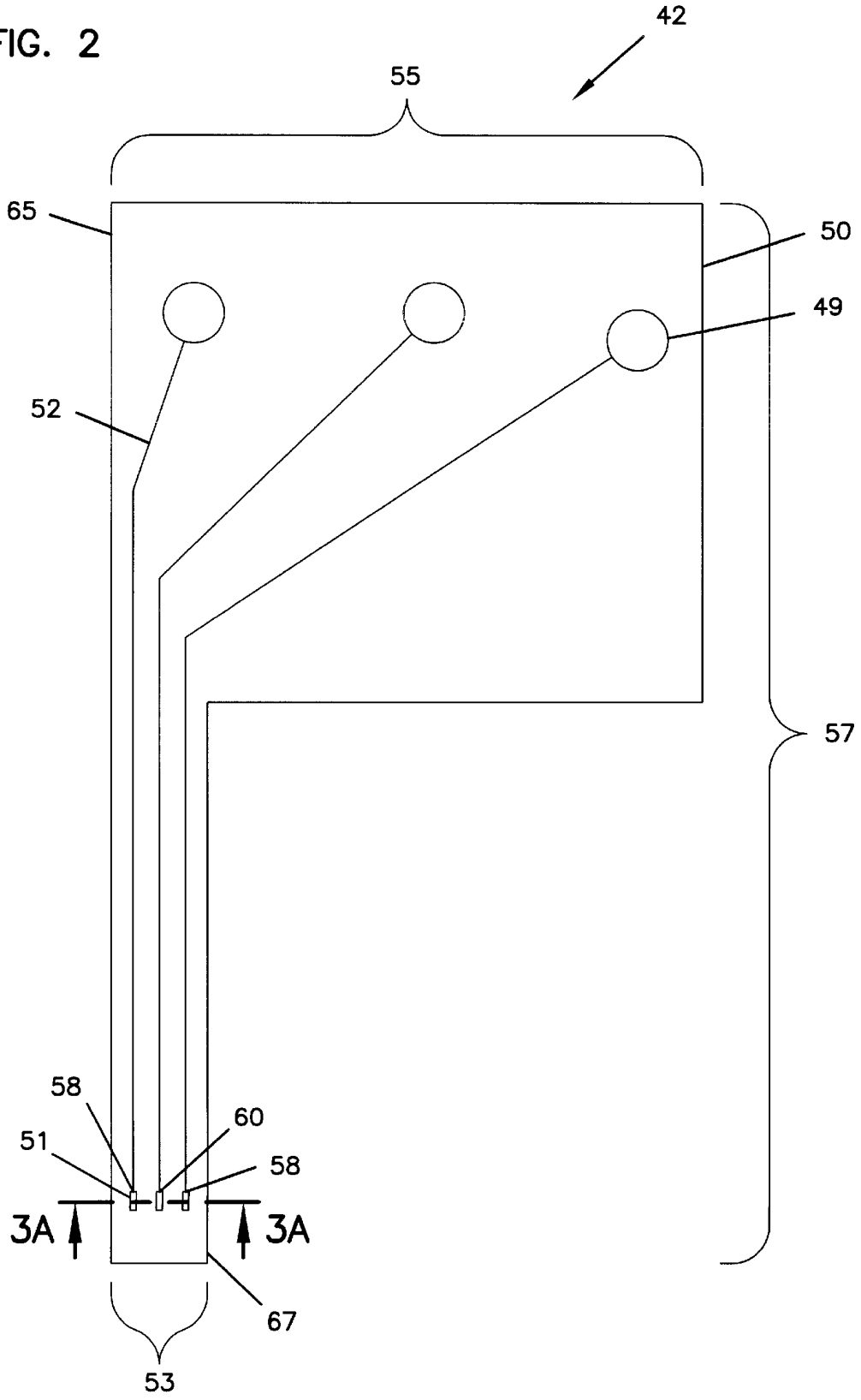

FIG. 3A

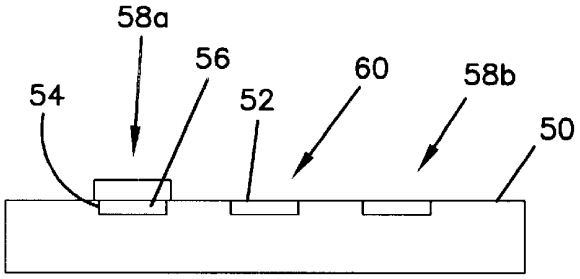

FIG. 3B

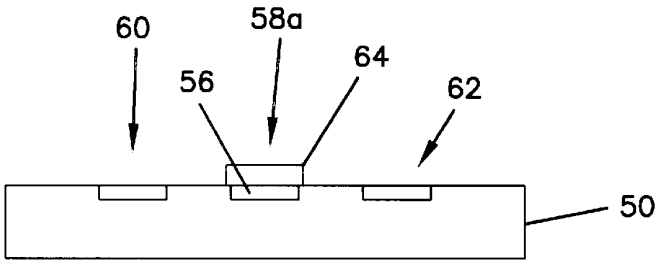

FIG. 9

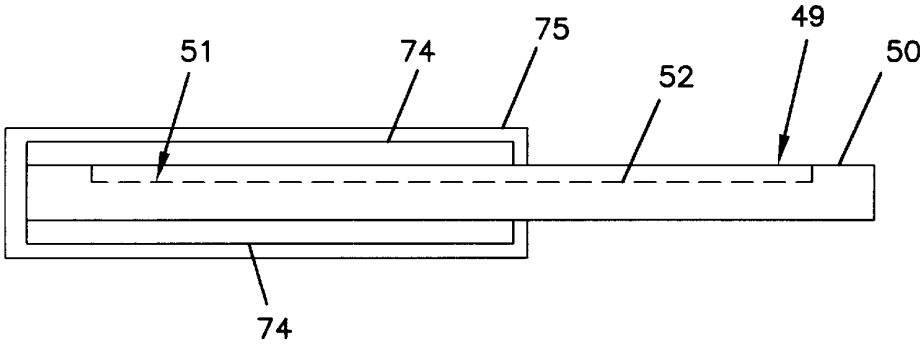

FIG. 4A

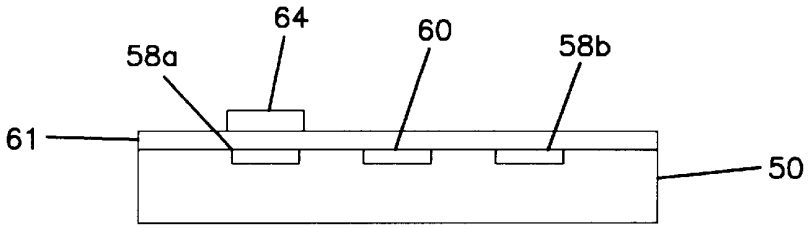

FIG. 4B

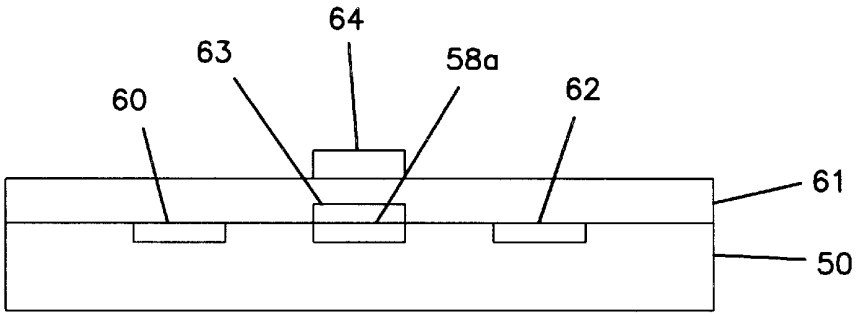

FIG. 5

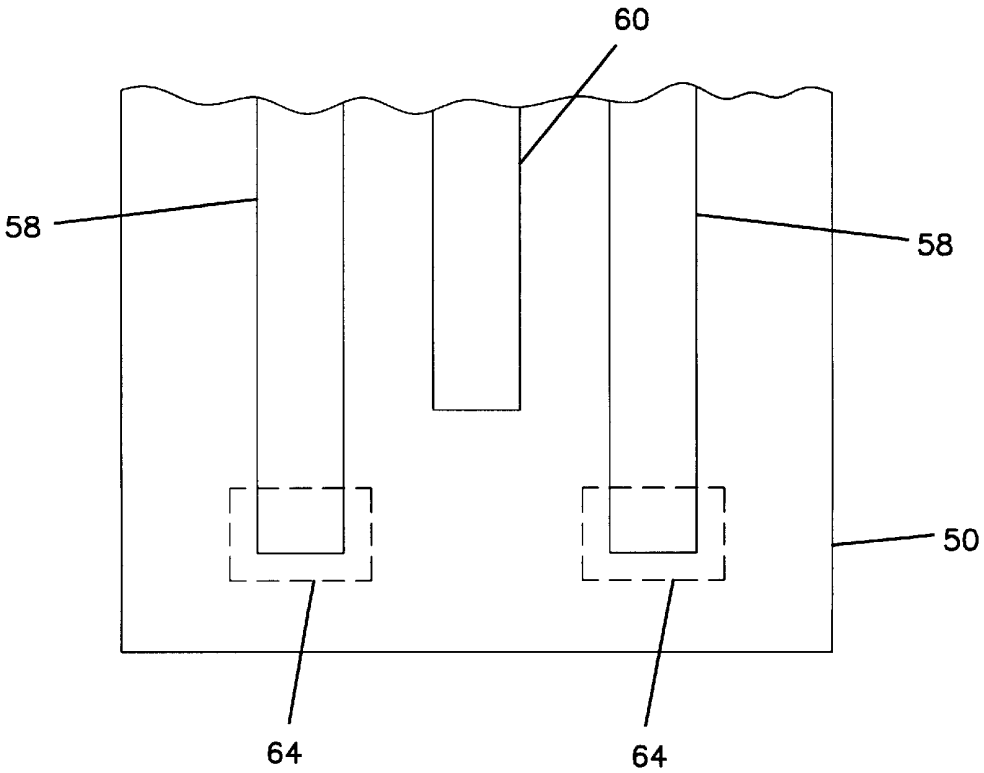

FIG. 6

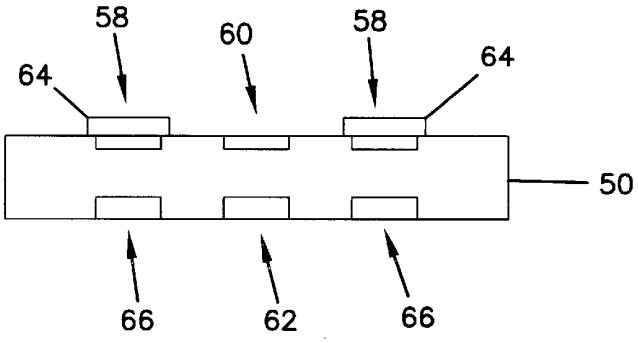

FIG. 7

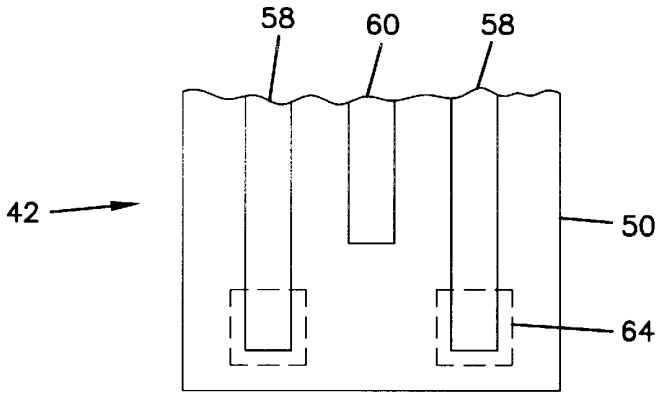

FIG. 8

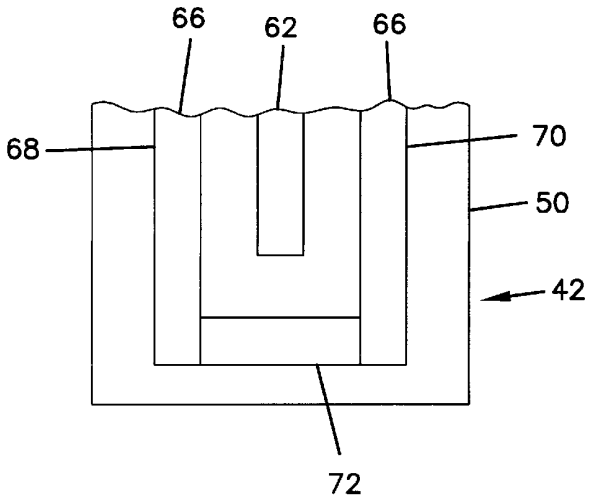

FIG. 10

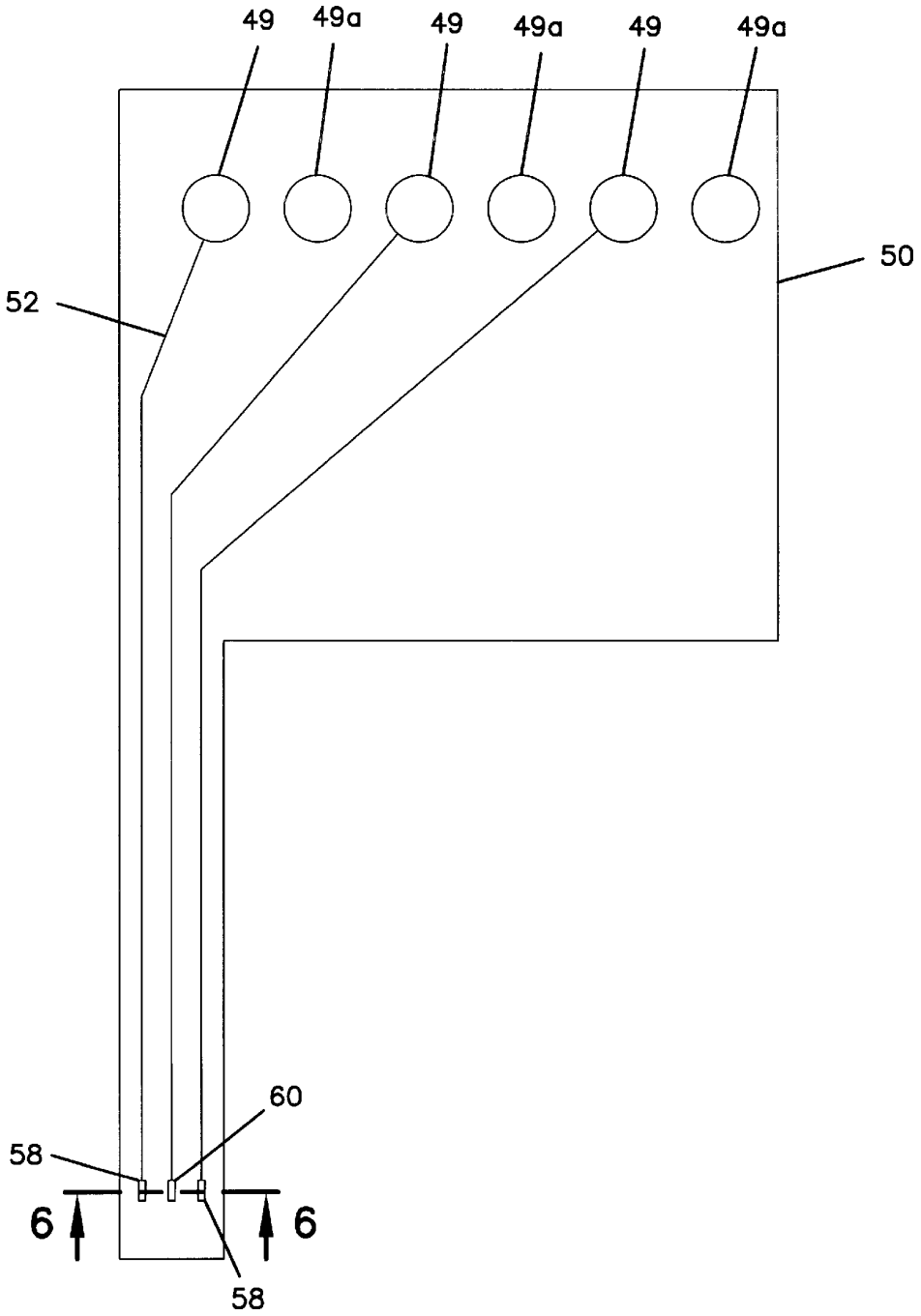

FIG. 11

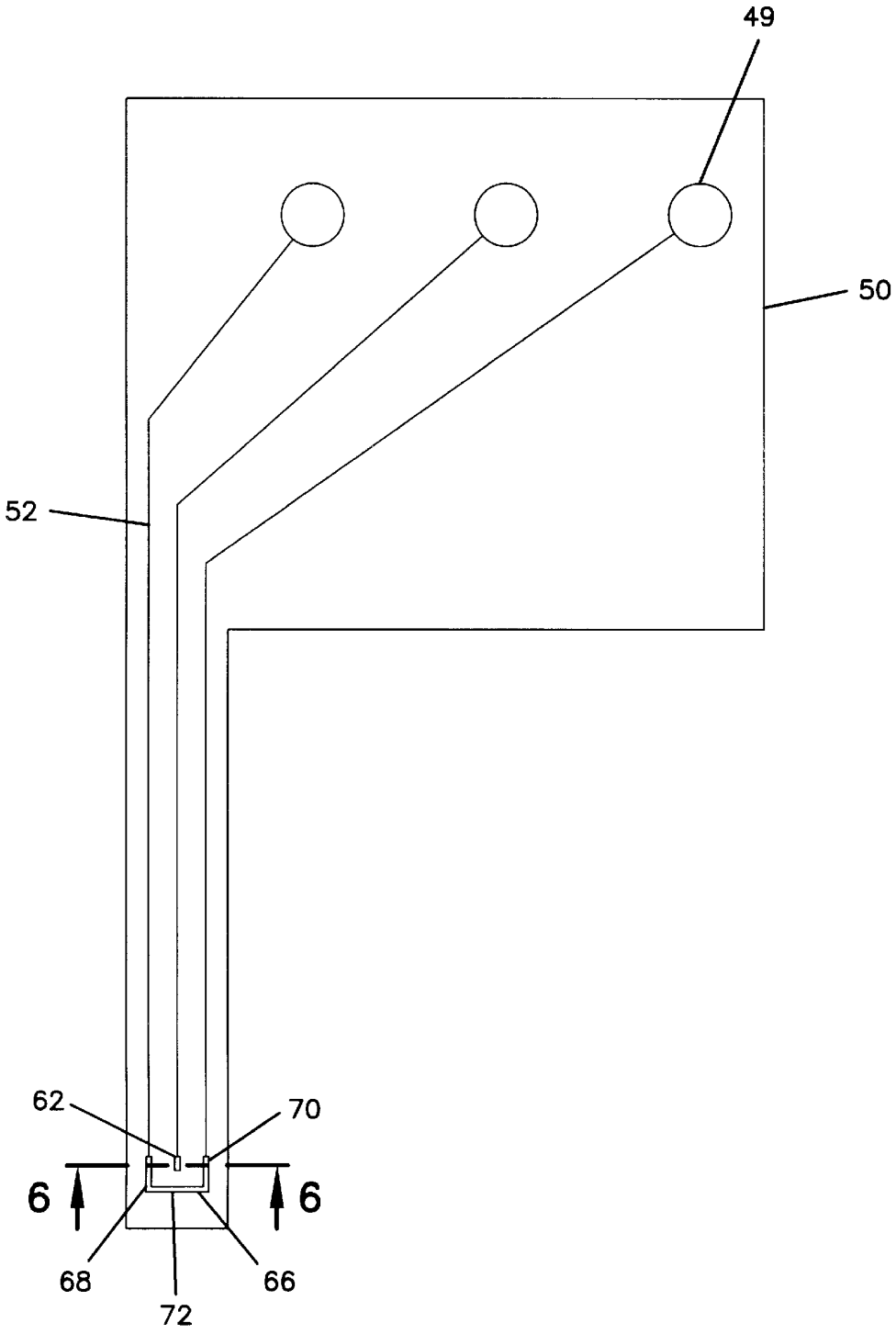

FIG. 12

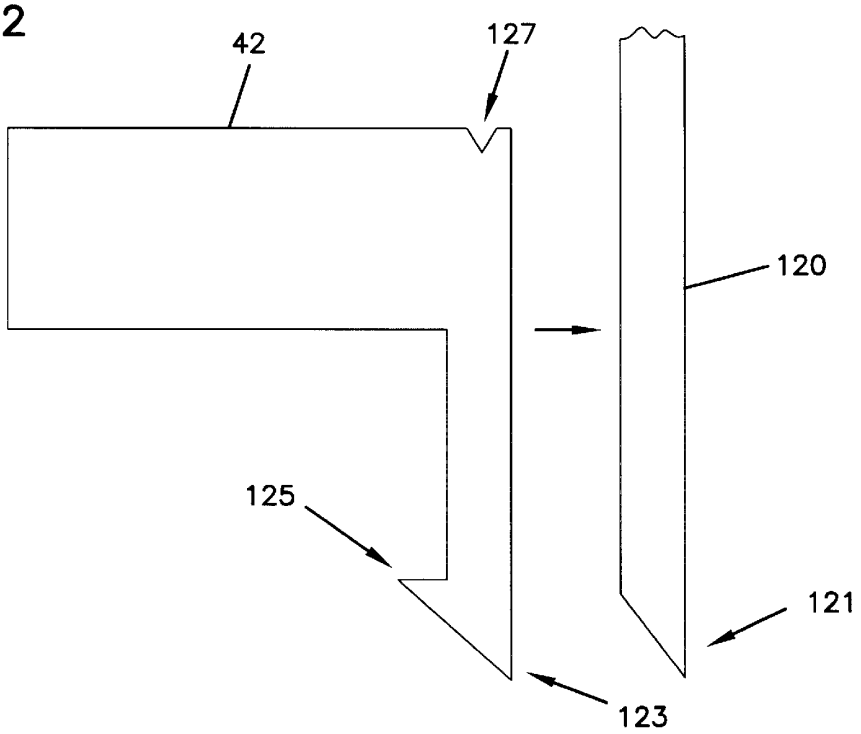

FIG. 13A

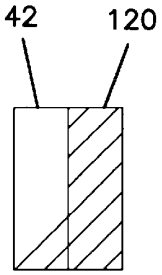

FIG. 13B

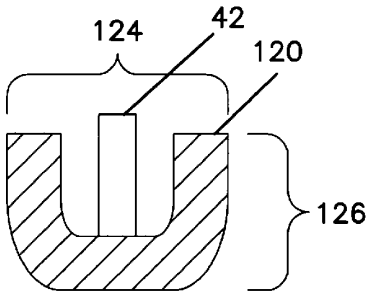

FIG. 13C